

# NOAA's Office of Marine and Aviation Operations

## Fleet Recapitalization 101

Building NOAA's 21<sup>st</sup> Century Fleet

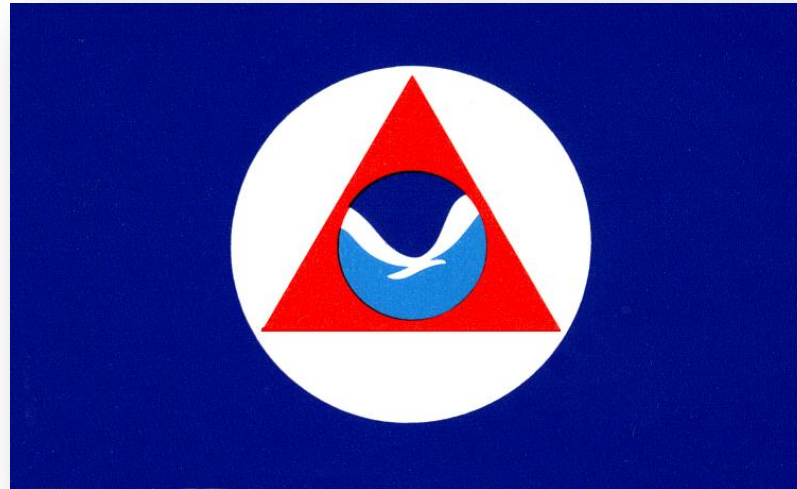
March 8, 2017



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For future questions and information on OMAO and the NOAA Corps, please contact Tim Bagley in NOAA's Office of Legislative and Intergovernmental Affairs – [timothy.bagley@noaa.gov](mailto:timothy.bagley@noaa.gov).

Copies of the monthly **NOAA Fleet Update** may be viewed and downloaded at <http://www.legislative.noaa.gov/>.



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# Director, OMAO and the NOAA Corps



## **Rear Admiral David A. Score (2 star) Director, NOAA Commissioned Officer Corps and Office of Marine and Aviation Operations (OMAO)**

As Director of the NOAA Corps and OMAO, Rear Admiral (RADM) Score is responsible for the safe, efficient and effective operation of the agency's fleet of research and survey ships and aircraft, as well as guiding the 321 commissioned NOAA officers and approximately 1,000 civilian personnel assigned to OMAO.

RADM Score previously served as Deputy Director of the NOAA Corps and OMAO's Deputy Director for Operations. Earlier assignments include: Director of OMAO's Marine Operations Centers, which oversees all NOAA ship operations, and Commanding Officer of the NOAA Marine Operations Center-Atlantic in Norfolk, Virginia. Before directing NOAA's Atlantic fleet, RADM Score commanded NOAA Ship *Gordon Gunter*, which conducted key research missions during the BP *Deepwater Horizon* oil spill response.

RADM Score's full bio is available online at:

<http://www.oma.noaa.gov/find/people/rear-admiral-david-score>



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# OMAO

## Providing environmental intelligence for a dynamic world

- The personnel, ships, and aircraft of NOAA play a critical role in gathering environmental data vital to the nation's economic security, the safety of its citizens, and the understanding, protection, and management of our natural resources.
- The NOAA fleet is managed and operated by OMAO, one of six Line Offices within NOAA, and is comprised of civilians, mariners, and officers of the NOAA Corps - one of the seven uniformed services of the United States.
- NOAA's roots trace back to when President Thomas Jefferson ordered the first comprehensive coastal surveys. Those early surveys ensured safe passage of ship-borne cargo for a young nation.
- As the needs of the nation have grown, so too have OMAO's responsibilities.



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# OMAO Personnel

A diverse, highly skilled, adaptable workforce with an authorized strength of approximately 1,100 employees, with six personnel systems and five employee unions:

- GS/CAPS civilians and SES (1) – Primarily land-side mission support, platform acquisition and maintenance, resource management, and administration.
- Wage Mariners – Licensed engineers and mates and unlicensed deck, engineering, steward, and survey technician personnel comprise the majority of sea-going crew aboard NOAA ships.
- NOAA Commissioned Officer Corps – NOAA Corps officers serve in OMAO's operational and administrative leadership positions at sea, in the air, and ashore, as well as leadership positions throughout NOAA Line Offices and other federal agencies and institutions.
- U.S. Public Health Service Commissioned Officers Corps – USPHS officers provide medical care at sea and medical administrative services and specialized IT services ashore.
- Contractors – Specialized support in IT and platform acquisition.



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# NOAA Commissioned Officer Corps

The officers of the NOAA Corps are operational leaders:

- As one of the seven U.S. uniformed services, serve with the “special trust and confidence” of the President.
- The NOAA Corps traces its roots back to the former U.S. Coast and Geodetic Survey, which dates back to 1807 and President Thomas Jefferson. Entering World War I in 1917, the U.S. Coast and Geodetic Survey Corps was formally commissioned to provide officers to command U.S. coastal survey ships and field survey parties locally and abroad. In 1970, NOAA was created to develop a coordinated approach to oceanographic and atmospheric research and subsequent legislation converted the USC&GS Corps to the NOAA Corps.
- NOAA Corps officers all have a science or engineering background and provide the technical and operational expertise, dynamic leadership, and breadth of experience to optimize NOAA’s missions through planning, preparation, and execution.
- The NOAA Corps is an integral part of NOAA and with 321 officers, the NOAA Corps serves throughout the agency’s line and staff offices to support nearly all of NOAA’s programs and missions.
- NOAA Corps officers operate NOAA’s ships, fly aircraft, manage research projects, conduct diving operations, and serve in staff and leadership positions throughout NOAA.



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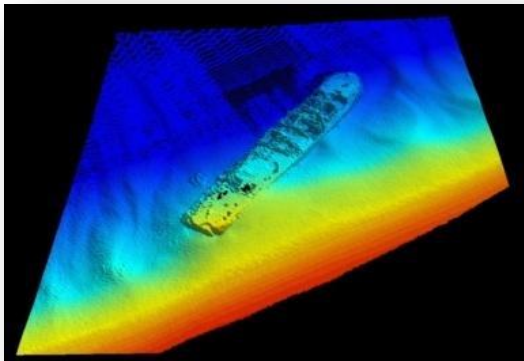
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# OMAO Operations

- The OMAO Fleet includes 16 ships – the largest civilian research fleet in the United States - and nine specialized aircraft.
- OMAO's ships support fishery, hydrographic, and marine ecosystems surveys, allowing us to support more robust stock assessments, update our nautical charts faster, and ensure our buoy networks receive the maintenance they need.
- OMAO's aircraft collect environmental and geographic data essential to studying climate change, assessing marine mammal populations, surveying coastal erosion, investigating oil spills, improving hurricane and winter storm forecasts.

In 2016:

- OMAO's ships sailed more than **368,000 nautical miles**
- OMAO's aircraft flew more than **4,760 accident-free hours**
- 383 NOAA Divers logged **9,863 dives**, resulting in more than 6,075 hours underwater



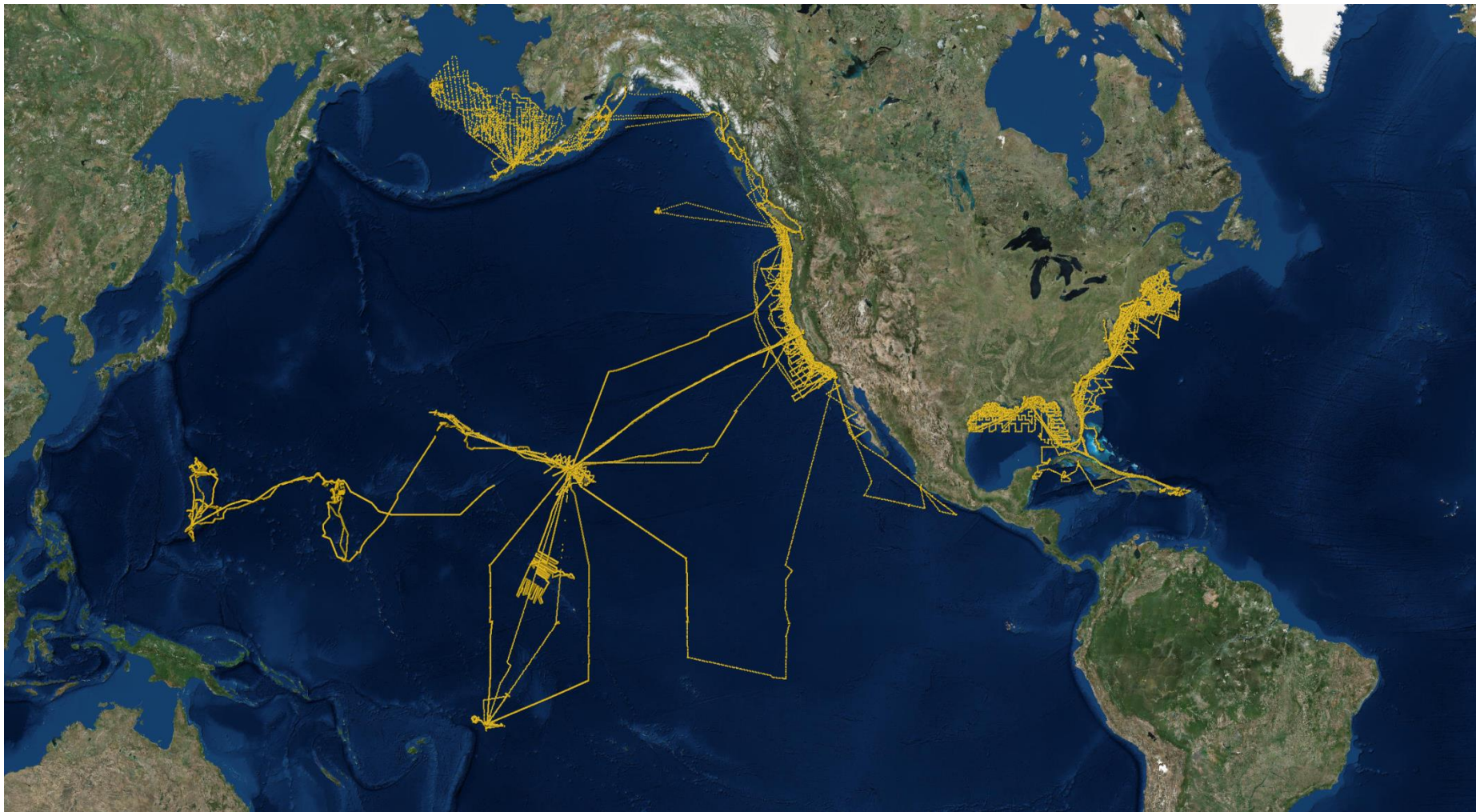
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# NOAA Fleet Tracklines – FY 2016



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# OMAO's Ships and Centers

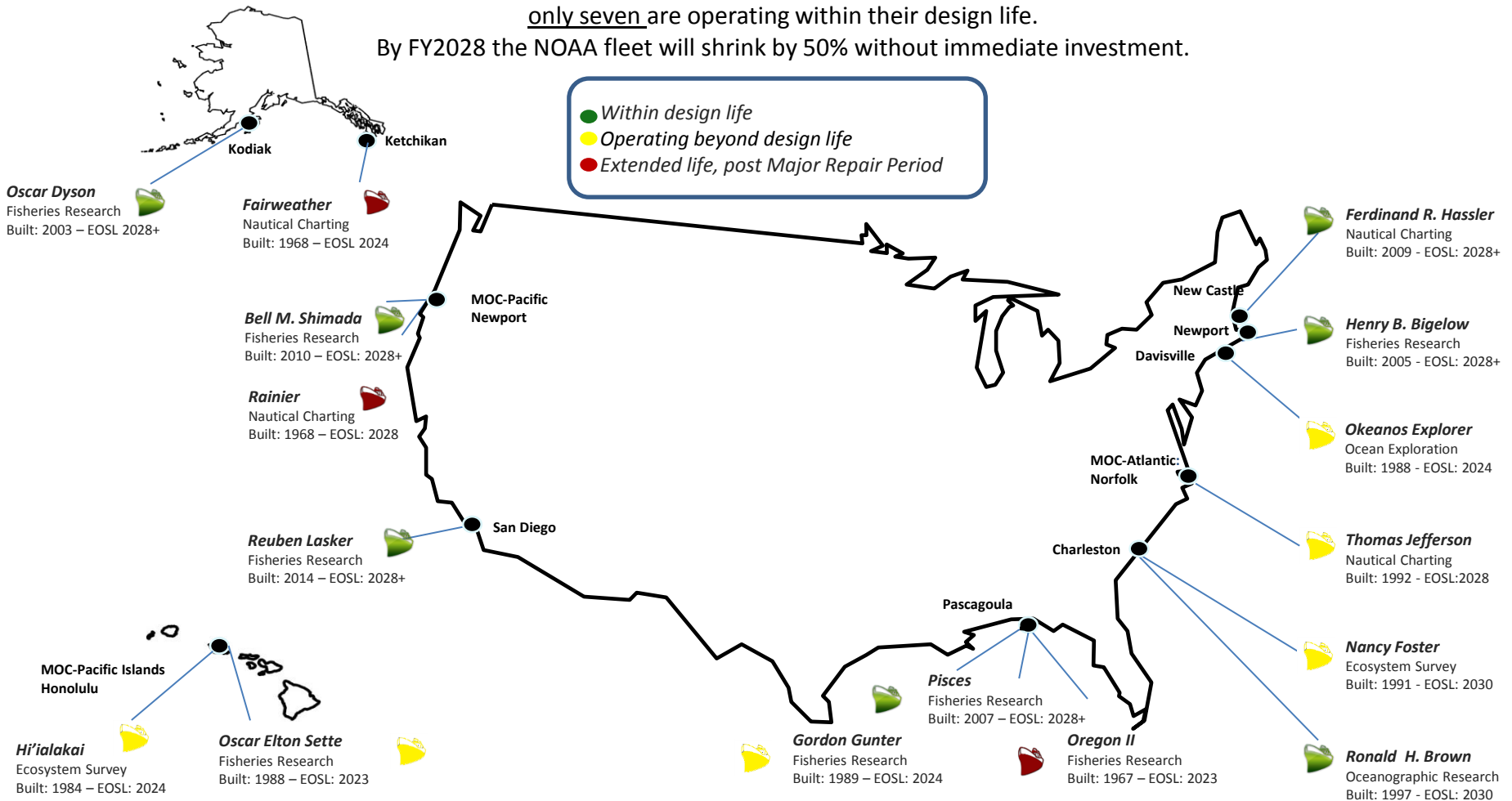
The fleet is listed with ship name, homeport location, primary mission, year built, and projected End of Service Life (EOSL).

NOAA's ships range in age from three to 50 years old. Out of 16 ships in the fleet,

only seven are operating within their design life.

By FY2028 the NOAA fleet will shrink by 50% without immediate investment.

- Within design life
- Operating beyond design life
- Extended life, post Major Repair Period



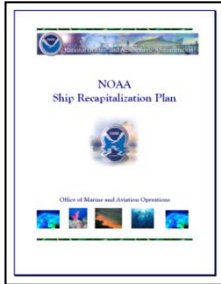
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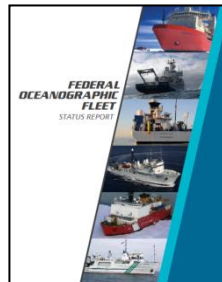
# How Did We Get Here?

## NOAA Ship Recapitalization Plan



2008

2013

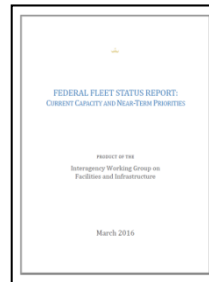


## Federal Oceanographic Fleet Status Report

## NOAA Fleet Independent Review Team (IRT) starts

2016  
JAN

MAR  
2016



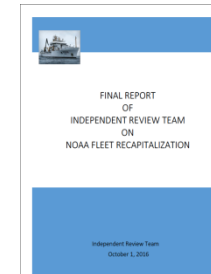
## IWG-FI Federal Fleet Status Report

## IRT Mid-term Status, Findings and Preliminary Recommendations



2016  
JUL

OCT  
2016



## IRT Final Report

## NOAA Fleet Plan



2016  
OCT



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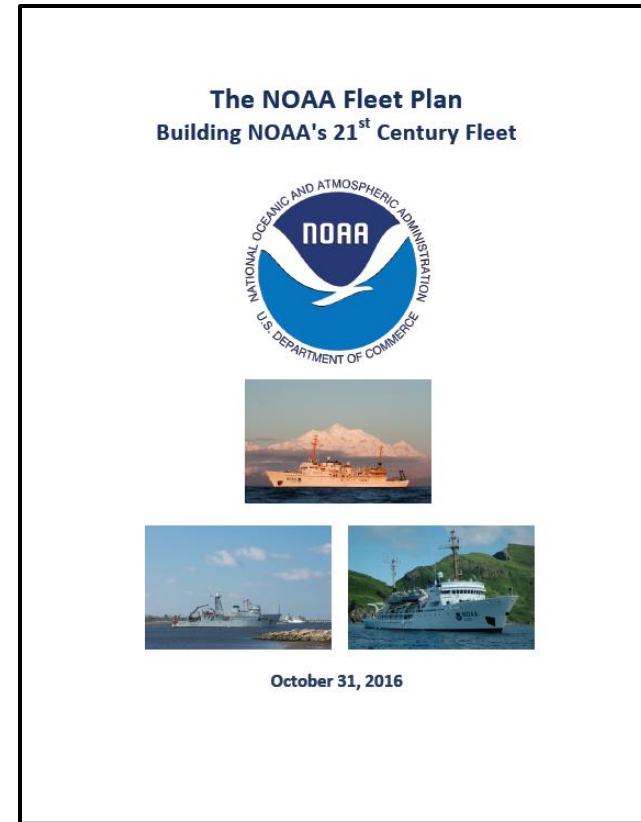
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# 2016 NOAA Fleet Plan

One-NOAA report that assesses future at-sea observational needs of NOAA.

## Recommendations:

- Sustain capabilities with up to 8 new ships
- Start now with U.S. Navy Auxiliary General Purpose Oceanographic Research Vessel (AGOR) design: meets requirements, known platform, leverages resources and time
- Increase use of existing NOAA ships & small boats
- Increase use of charters
- Strengthen partnerships
- Integrate emerging technologies



The NOAA Fleet Plan is available for download at:

<http://www.legislative.noaa.gov/policybriefs/NOAA%20Fleet%20Plan%20103116.pdf>



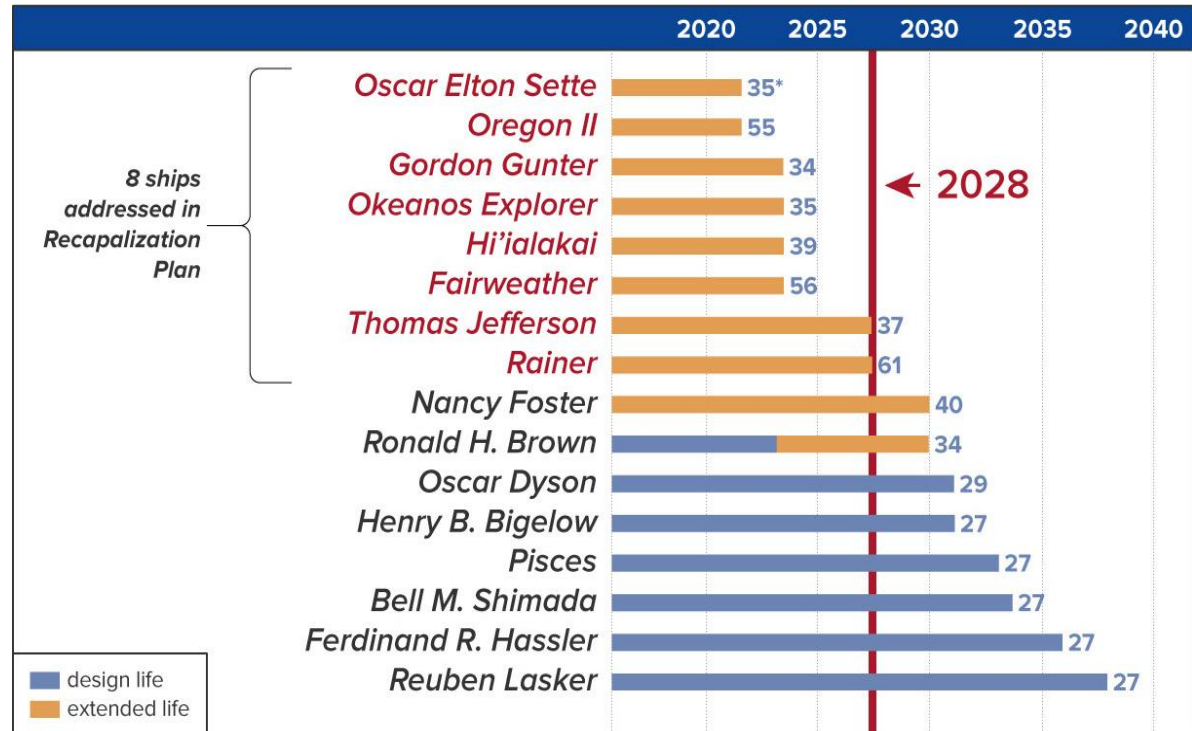
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# Challenges for the NOAA Fleet

- Age and obsolescence
- Reduced at-sea capacity
- Expanding mission requirements
- Limited funds for modernization
- 8 ships retire by 2028



\*age of ship at retirement



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# Long-Term Recapitalization: Future NOAA Ships and Missions

Ship	Primary Mission	Secondary Mission(s)
<b>NOAA Vessel (N/V) Class A (AGOR Variant)</b>	Oceanographic Monitoring, Research & Modeling	Assessment and Management of Living Marine Resources (no trawl), Charting and Surveying
<b>N/V Class B</b>	Charting and Surveying	Assessment and Management of Living Marine Resources (no trawl), Oceanographic Monitoring, Research & Modeling
<b>N/V Class C</b>	Assessment and Management of Living Marine Resources (trawl-capable, shallow-draft)	Charting and Surveying
<b>N/V Class D</b>	Assessment and Management of Living Marine Resources (trawl capable, near-shore and deep ocean, longer endurance)	Charting and Surveying, Oceanographic Monitoring, Research & Modeling



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# NOAA is Undertaking the Following Steps:

## Long-term Recapitalization:

- **Executing FY16 funding for vessel acquisition** (Phase I, Q3 FY 2017), the first step in the NOAA Fleet Plan
- **Interagency Agreement (IAA) with U.S. Navy (USN)** (Q1 FY 2017)
  - outlines detailed funding and acquisition process deliverables
- **Filling critical federal positions** (Q3, FY 2017 pending hiring exemption)
  - lead naval architect, lead mechanical engineer, and general engineer
- **Engineering and administrative support contract** (Q3 FY 2017)
  - supports broad recapitalization and life cycle management efforts
- **Force Architecture study** with contractor (Q3 FY 2017)
  - Will inform ship type and capabilities for broad recapitalization

## Fleet Management Best Practices:

- **Vessel condition assessment** with the American Bureau of Shipping
  - Eight oldest ships completed FY 2017
- **Fleet societal benefits study** (Q3 FY 2017)
  - Evaluating the benefit of NOAA's fleet to society as well as the cost effectiveness of using charters
- **Filling critical positions** to efficiently maintain and operate Fleet

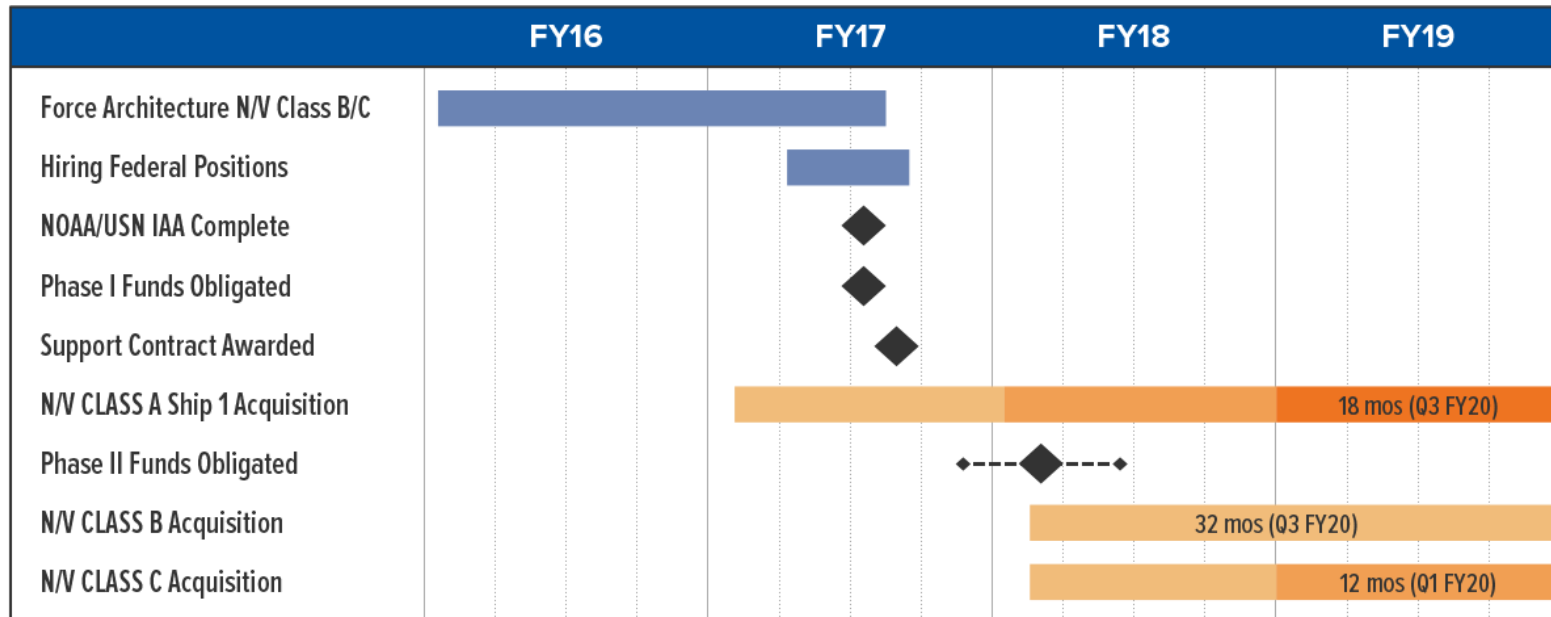


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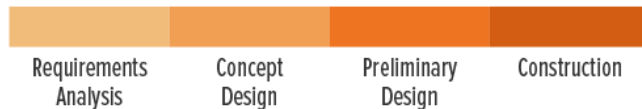
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# Notional Long-Term Fleet Recapitalization Schedule FY 17-19



• MS indicates the Navy Milestone review process step (A,B,C). N/V Class B or C indicates the NOAA Vessel type.



## Assumptions

- Appropriations in Q1 each FY
- Stable funding profile
- No delays in FTE hires
- No delays in contract awards
- Two N/V Class A ships



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# Long-Term Recapitalization: N/V Class A (AGOR variant)

## Funding to the Navy:

### Phase I:

- Project inception through preliminary design
- Acquisition documentation refresh, NOAA/Navy internal reviews, Milestone Review Board Approvals
- Issuance, selection, award and execution of the Preliminary/ Contract Design (PD/CD) competition between multiple vendors

### Phase II:

- Detailed design and construction
- Design, integration, construction, testing, trials, and Preliminary Acceptance of new vessel
- Does not include post-delivery (spares, outfitting, shakedown or warranty)

## In-House and Support Contract:

- Supports OMAO FTE and Support Contract work
- Provides NOAA inherently governmental functions and support for NOAA/Navy joint acquisition team



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# Helpful Web Links

NOAA Fleet Plan:

<http://www.oma.noaa.gov/find/media/documents/noaa-fleet-plan-building-noaas-21st-century-fleet-0>

Please also visit:

<http://www.oma.noaa.gov/>

<http://www.oma.noaa.gov/learn/marine-operations>

<http://www.oma.noaa.gov/learn/aircraft-operations>

<http://www.oma.noaa.gov/learn/diving-program>

<http://www.oma.noaa.gov/learn/noaa-commissioned-officer-corps>

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# NOAA

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